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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/079,414  | 02/22/2002  | Kunihiko Kodama      | Q68653              | 8473             |
| 23373   | 7590        | 03/31/2004           | EXAMINER            |                  |
| SUGHRUE MION, PLLC<br>2100 PENNSYLVANIA AVENUE, N.W.<br>SUITE 800<br>WASHINGTON, DC 20037 |             |                      | CHU, JOHN S Y       |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1752                |                  |

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/079,414

**Applicant(s)**

KODAMA ET AL.

**Examiner**

John S. Chu

**Art Unit**

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 11-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/22/02</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This Office action is in response to the application filed February 22, 2002.

#### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over HARADA et al.

The claimed invention is drawn to the following:

1. A positive photosensitive composition comprising:
  - (A) an acid generator capable of generating an acid upon irradiation with one of an actinic ray and a radiation;
  - (B) a resin: having a monocyclic or polycyclic alicyclic hydrocarbon structure; and being capable of decomposing by the action of an acid to increase the solubility in an alkali developer;
  - (C) a basic compound; and
  - (D) a surfactant containing at least one of a fluorine atom and a silicon atom;wherein the acid generator (A) comprises at least two compounds selected from the group consisting of a sulfonium salt compound not having an aromatic ring, a triarylsulfonium salt compound, and a compound having a phenacylsulfonium salt structure.

HARADA et al discloses an acid generator which include a sulfonium salt as disclosed in column 20, line 10-44 wherein preferred are triphenylsulfonium salts. Applicants are directed to

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column 20, line 31-33 wherein HARADA et al teaches the use of acid generators singly or in combination, clearly motivating the skilled artisan to use more than more acid generator.

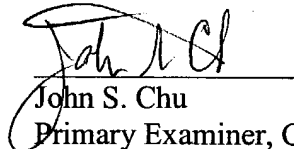
HARADA et al further recites the presence of ingredient (D) which is a basic compound in column 20, lines 45 et seq. and a nonionic surfactant as disclosed in column 24, lines 59 – column 25, line 3. Specifically the surfactant includes a fluorinated organosiloxane compound, as disclosed in line 61-63.

It would have been *prima facie* obvious to one of ordinary skill in the art of photoresists to select (1) a triphenyl sulfonium salt and trimethylsulfonium salt as the combination of acid generators for the photoresist and (2) select a nonionic surfactant which such as a fluorinated organosiloxane compound and reasonably expect same or similar results as disclosed in HARADA et al for high transmittance to VUV and high substrate adhesion.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chu whose telephone number is (571) 272-1329. The examiner can normally be reached on Monday - Friday from 9:30 am to 6:00 pm.

The fax phone number for the USPTO is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1700.

  
John S. Chu  
Primary Examiner, Group 1700

J.Chu  
March 22, 2004